

TAXONOMIC AND BIOLOGICAL NOTES ON THE GENUS *PHYTOMYZOPHAGA* (HYMENOPTERA: EULOPHIDAE)

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Abstract.—The genus *Phytomyzophaga* Brèthes (Eulophidae) is synonymized with *Chrysocharis* Förster. The type species, *P. albipes* Brèthes, nec Ashmead, is given a new name (*brethesi*). Host records for this polyphagous leafminer (Agromyzidae) parasite are given.

Key Words: Taxonomy, Eulophidae, *Chrysocharis*, leafminer, parasite, South America

During biological studies on agromyzid leafminers in Argentina, one of us (AS) reared a large number of parasites of a species of entedonine eulophid from several species of hosts. The parasite was tentatively identified as a species described by J. Brèthes from Argentina. Further examination revealed that problems with the application of the Brèthes name required that some nomenclatural changes be made. This paper reports on those changes and also provides an opportunity for us to give a full listing of the host species from which this eulophid has been reared. Although many species of *Chrysocharis* have been reared from leafminers (Hansson 1987), few have been reared from as many identified hosts as has this species.

Chrysocharis Förster

Chrysocharis Förster, 1856.

Type species: *C. pubicornis* (Zetterstedt, 1838).

Phytomyzophaga Brèthes, 1923. New Synonym.

Type species: *Phytomyzophaga albipes* Brèthes. By Monotypy.

For a complete synonymy of *Chrysocharis*, see Schauff (1991).

We have examined the type of this genus and it agrees in all respects with the definition of *Chrysocharis* given by Schauff (1991). Therefore, we propose the above synonymy.

This species is somewhat unusual for *Chrysocharis* because it possesses plicae on the propodeum and most species in this genus do not. However, presence or absence of plicae is not a defining character for the genus and other species are known which possess this character.

Chrysocharis brethesi Schauff and Salvo, NEW NAME

Phytomyzophaga albipes Brèthes 1923.

Lectotype female (present designation) [examined]. Junior secondary homonym of *Chrysocharis albipes* Ashmead (1904) [described as *Nesomyia albipes*].

Discussion.—In his original description

Table 1. List of hosts, host plants, and sources of host records for *C. brethesi*.

Agromyzid Host	Plant	Source of Record
<i>Amauromyza maculosa</i>	Unknown plant	Valladares 1982
<i>Calycomyza eupatorivora</i>	<i>Eupatorium hookerianum</i>	New record
	<i>Eupatorium</i> sp.	
<i>C. malvae</i>	<i>Malvastrum coroman delianum</i>	New record
	<i>Malvaceae</i> sp.	
<i>C. lantanae</i>	<i>Lantana</i> sp.	New record
<i>C. playptera</i>	Unknown	Valladares 1982
	<i>Helianthus annus</i>	Toselli 1982
	<i>Tithonia rotundifolia</i>	Cornaglia 1987
	<i>Zinnia elegans</i>	Cornaglia 1987
<i>C. verbenivora</i>	<i>Lippia turbinata</i>	New record
<i>Chromatomyia platensis</i>	Unknown	Valladares 1982
	<i>Mentha</i> sp.	Costa Lima 1962
	<i>M. piperita</i>	De Santis 1967
	<i>M. rotundifolia</i>	New record
	<i>Ocimum basilicum</i>	New record
	<i>Salvia officinalis</i>	Toselli 1982
		Cornaglia 1987
	<i>S. splendens</i>	Toselli 1982
		Cornaglia 1987
<i>Japanagromyza polygoni</i>	<i>Polygonum</i> sp.	Brèthes 1923
<i>Liriomyza brassicae</i>	<i>Brassica oleracea</i>	New record
	var. <i>capitata</i>	New record
<i>L. commelinae</i>	<i>Commelinia erecta</i>	Cornaglia 1987
<i>L. huidobrensis</i>	Unknown	Valladares 1982
	<i>Calendula officinalis</i>	Toselli 1982
	<i>Licopersicum sculentum</i>	Cornaglia 1987
	<i>Papaver rhoes</i>	Toselli 1982
	<i>Phlox</i> sp.	Cornaglia 1987
	<i>Tagetes</i> sp.	New record
	<i>Tropaeolum majus</i>	Cornaglia 1987
	<i>Zea mays</i>	Toselli 1982
<i>L. spencerella</i>	Unknown	Cornaglia 1987
	<i>Chrysanthemum</i> sp.	Valladares 1982
<i>Ophiomyia camarae</i>	<i>Lantana camara</i>	Toselli 1982
		Valladares 1982
<i>O. verbenivora</i>	Unknown	Cornaglia 1987
<i>Phytomyza crassiseta</i>	<i>Veronica anagallis-aquatica</i>	Valladares 1982
	<i>Clematis</i> sp.	New record
<i>Phytomyza williamsoni</i>		Costa Lima 1962
		DeSantis 1967



Fig. 1. Scanning electron micrograph of propodeum of *C. brethesi*.

Brèthes (1923) did not designate a type, but did indicate that he had seen at least 20 specimens of this species. One of us (MES) has examined a female specimen from the museum in Buenos Aires, labelled by Brèthes as "type," which is hereby designated as lectotype. The lectotype is slide mounted with the data "Museo Arg. C. Naturales sección Entomología. Parasito de *Phytomyza platensis* Br. Minador de *Salvia*. Buenos Aires, I-923. J. Brèthes. no. 1479. P. 38. *Phytomyzophaga albipes*. Type." The label with the species name is badly faded and some writing is not legible. A small red lectotype label has been affixed to the specimen.

Biology.—*C. brethesi* has been reared from a total of 13 hosts on 25 host plants. Percent parasitism ranges up to 55%. Observations indicate that this species is generally a larval-pupal parasitoid, but that on occasion, the adult wasp emerges from the larva prior to pupation.

Hosts.—The following summary of hosts (Table 1) for this species is drawn from rearings by one of us (AS) and from the literature.

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